

TECHNICAL MANUAL

POWER SUPPLIES PP-281/GRC, PP-281A/GRC, PP-282/GRC, PP-282A/GRC, AND PP-448/GR

TM 11-5040
CHANGES No. 2

HEADQUARTERS,
DEPARTMENT OF THE ARMY
WASHINGTON 25, D. C., 19 February 1958

TM 11-5040, 29 November 1950, is changed as indicated so that the manual also applies to—

Nomenclature	Order No.	Serial No.
Power Supply PP-281A/GRC	42913-Phila-57	1-633
Power Supply PP-282A/GRC	42913-Phila-57	1-8380

Change the title of the manual to: POWER SUPPLIES PP-281/GRC, PP-281A/GRC, PP-282/GRC, PP-282A/GRC, AND PP-448/GR.

Page 1. Add the following note below the title of Chapter 1:

Note. Power Supplies PP-281A/GRC and PP-282A/GRC are similar to Power Supplies PP-281/GRC and PP-282/GRC. Information in this manual applies to all these sets, unless otherwise specified.

Page 1, paragraph 2.

b. (Superseded) Fill out and forward DA Form 468 (Unsatisfactory Equipment Report) to Commanding Officer, United States Army Signal Equipment Support Agency, Fort Monmouth, N. J., as prescribed in AR 700-38.

Page 2, paragraph 7. Designate the existing paragraph as a.

Add the following subparagraph:

b. Design differences exist between Power Supply PP-281/GRC and Power Supply PP-281A/GRC; also between Power Supply PP-282/GRC and Power Supply PP-282A/GRC. The chart below lists the differences.

Component	Power Supply PP-281/GRC	Power Supply PP-281A/GRC	Power Supply PP-282/GRC	Power Supply PP-282A/GRC
C1	5,000 $\mu\mu\text{f}$	10,000 $\mu\mu\text{f}$	5,000 $\mu\mu\text{f}$	10,000 $\mu\mu\text{f}$
C5	Not present	1 μf	1 μf	1 μf
C6	Not present	39 μf	Not present	39 μf
R4	20 ohms	Not present	Not present	Not present
Wire to term. 4 of X-3	Yes	Not present	Yes	Not present

Page 4, paragraph 8. Delete the note under the paragraph heading and substitute:

Note. Shunt-drive vibrators have now become standard military types and are preferred to the series-drive vibrators. Shunt-drive vibrators should be requisitioned instead of series-drive vibrators, if replacement is required in any of the three power supplies described in this manual.

Page 5, paragraph 8c. Add the following note after subparagraph (2):

Note. In power supplies procured on Order No. 42913-Phila-57, the battery input circuit is filtered by rf choke L1 and capacitors C1 and C6 to prevent electrical interference from reaching the radio set being operated.

Page 5, paragraph 8. Add the following note to subparagraph d:

Note. Information in this subparagraph is not applicable to power supplies procured on Order No. 42913-Phila-57.

Page 5, paragraph 9. Add the following note after subparagraph a:

Note. Resistor R4 is not included in power supplies procured on Order No. 42913-Phila-57.

Add the following note to subparagraph c:

Note. Information in this subparagraph is not applicable to power supplies procured on Order No. 42913-Phila-57.

Add the following note after subparagraph d:

Note. Capacitor C5 is used in power supplies procured on Order No. 42913-Phila-57; accordingly, the second sentence in the above paragraph does not apply.

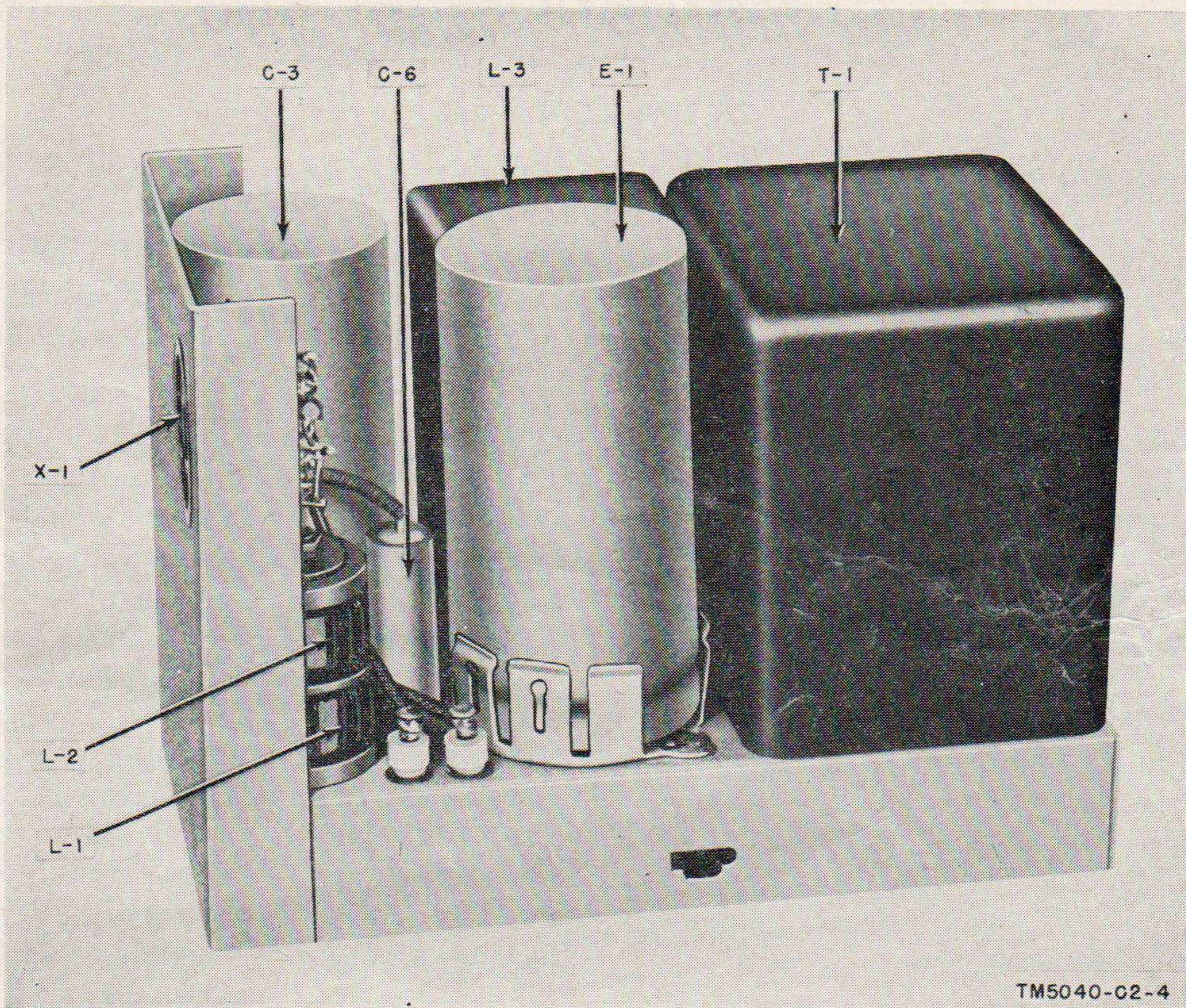


Figure 3.1 (Added) Power Supplies PP-281A/GRC and PP-282A/GRC, top of chassis.

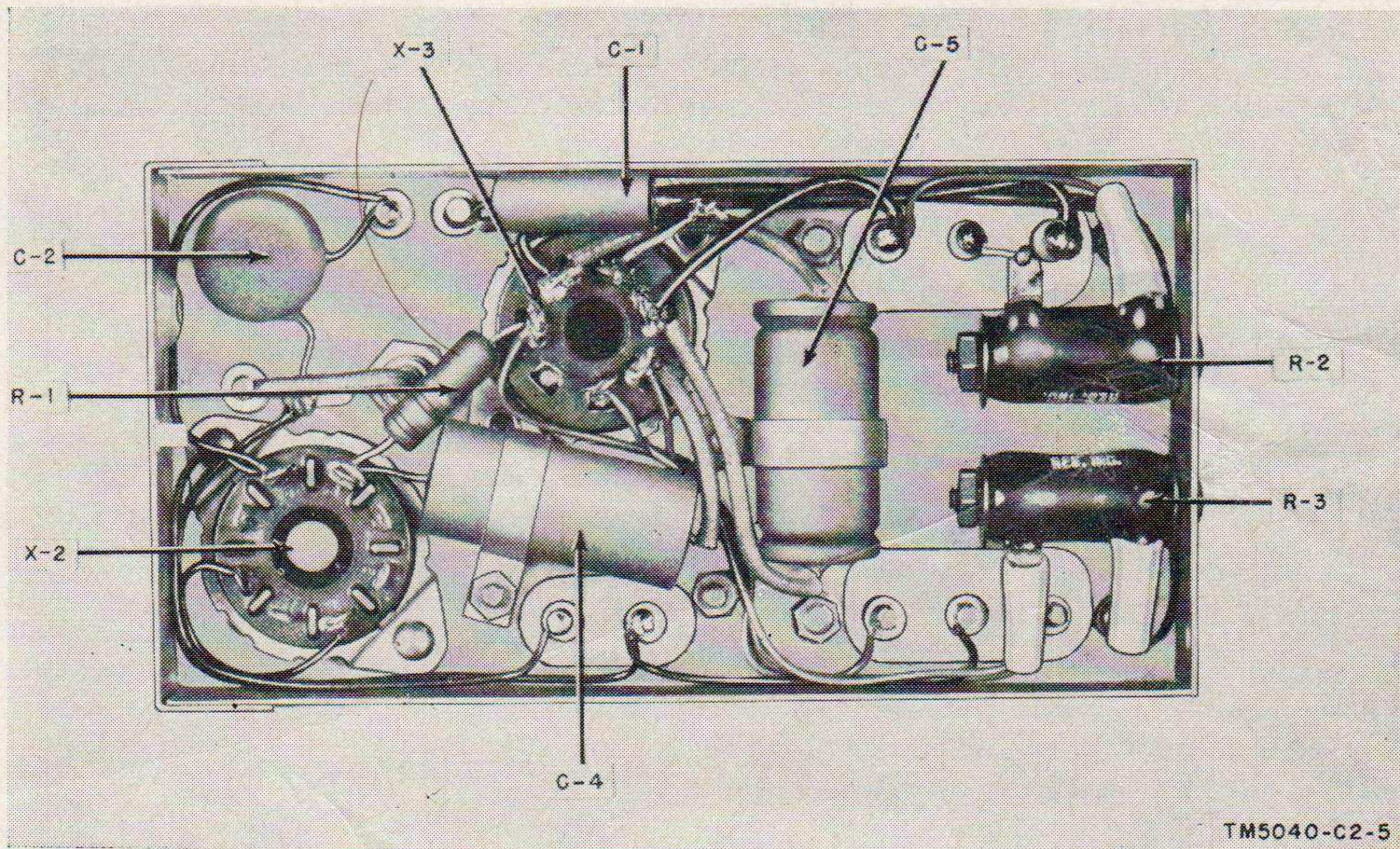


Figure 4.1 (Added) Power Supplies PP-281A/GRC, under chassis.

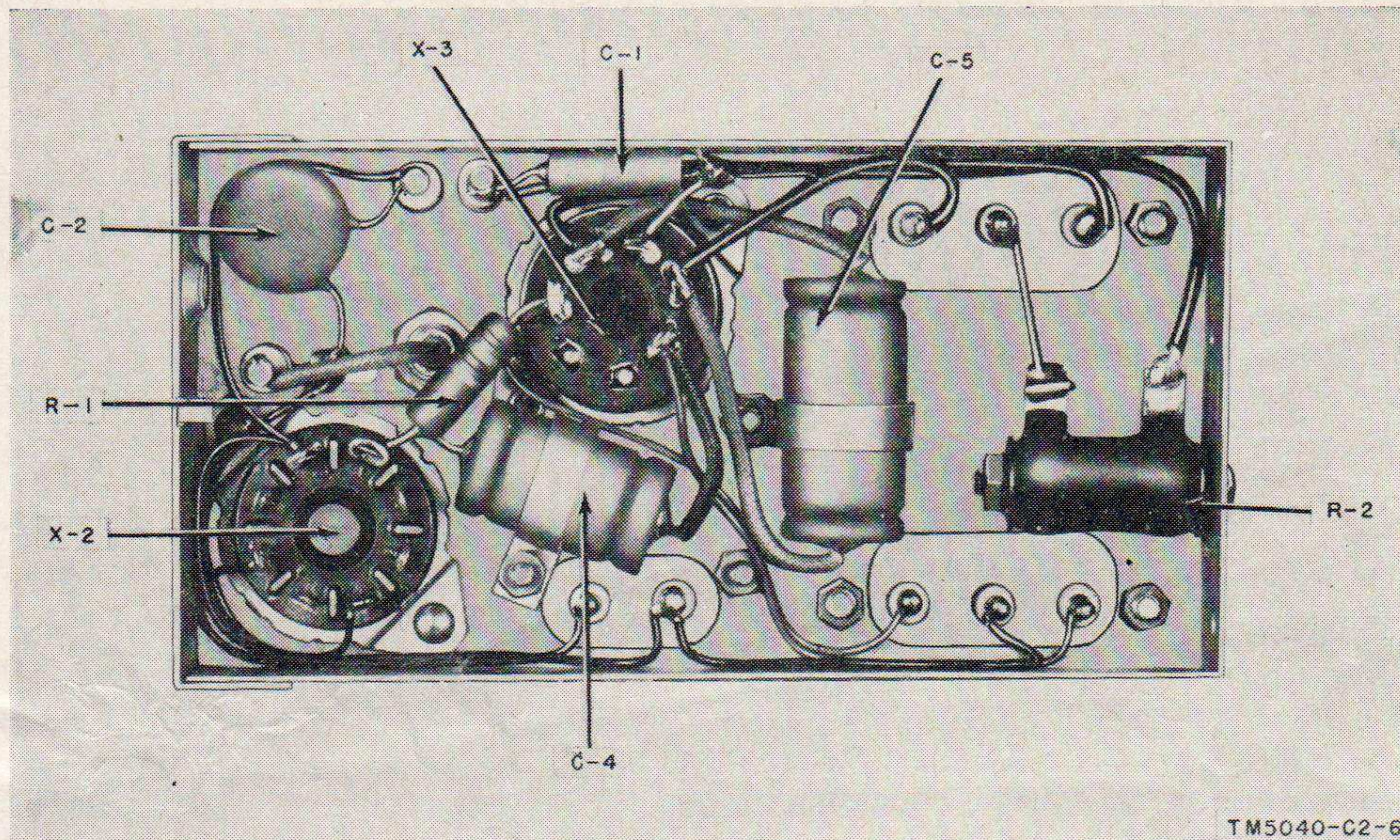


Figure 4.2 (Added) Power Supply PP-282A/GRC, under chassis.

Page 8, paragraph 13d, chart. Change "series-drive" to read: **series-drive***.

Add the following footnote below the chart:

*Not used in Power Supplies PP-281A/GRC and PP-282A/GRC.

Page 11, paragraph 19, resistance measurements chart. Change "Term. 3 on X-1 to term. 4 on X-3" to read: **Term. 3 on X-1 to term. 4 on X-3.****

Add the following footnote:

**Not applicable in power supplies PP-281 A/GRC and PP-282A/GRC.

Page 17. Delete appendix II.

Page 23, figure 8. Number the existing note: 1.

Add the following:

2. FOR POWER SUPPLIES PROCURED ON ORDER NO. 42913-PHILA-57, THE WIRE CONNECTING TO TERMINAL 4 OF X3 IS DELETED; THE SERIES-DRIVE VIBRATOR SYMBOL IS DELETED; FEED-

THROUGH CAPACITOR C6, .39 UF, IS ADDED BETWEEN TERMINAL 6 OF X1 AND L1 TO GROUND; AND CAPACITOR C1 IS CHANGED FROM 5,000 TO 10,000.

Page 23, figure 9. Number the existing note: 1.
Add the following:

2. FOR POWER SUPPLIES PROCURED ON ORDER NO. 42913-PHILA-57, RESISTOR R4 IS DELETED; THE WIRE CONNECTING TO TERMINAL 4 OF X3 IS DELETED; THE SERIES-DRIVE VIBRATOR SYMBOL IS DELETED; FEED-THROUGH CAPACITOR C6, .39 UF, IS ADDED BETWEEN TERMINAL 5 OF X1 AND L1 TO GROUND; CAPACITOR C1 IS CHANGED FROM 5,000 TO 10,000, AND CAPACITOR C5, 1 UF, IS ADDED BETWEEN TERMINALS 1 AND 3 OF T1.

[AG 412.42 (6 Feb 58)]

By Order of *Wilber M. Brucker*, Secretary of the Army:

MAXWELL D. TAYLOR,
General, United States Army,
Chief of Staff.

Official:

HERBERT M. JONES,
Major General, United States Army,
The Adjutant General.

Distribution:

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USA Abn & Elet Bd	Mil Dist	7-16	17-57
USA Avn Bd	JBUSMC	7-25	17-62
USA Arctic Test Bd	Units organized under fol-	7-26	17-87T
USARADCOM	lowing TOE's:	7-27	17-115
OS Maj Com	5-215	7-31	17-116
Log Comd	5-217	7-32	17-117
MDW	5-218	7-34	17-125
Armies	6-100	7-35	17-126
Corps	6-125	7-36	17-127
Div	6-126	7-95	19-27
USATC	6-200	7-96	39-61
Ft & Camps	6-225	9-65	44-17
USMA	6-226	9-66	44-35
Svc Colleges	6-300	9-67	44-36
Br Svc Sch	6-315	11-7	44-37
Gen Depots	6-316	11-16	44-75
Sig Sec, Gen Depots	6-317	11-57	44-76
Sig Depots	6-325	11-127	44-77
Ports of Emb (OS)	6-327	11-128	44-275
Trans Terminal Comd	6-415	11-500 (AA-AE)	44-276
Army Terminals	6-416	11-557	44-277
OS Sup Agcy	6-417	11-587	44-446
USA Arty & Msl Cen,	6-435	11-592	51-2
Ft Sill, Okla	6-437	11-597	52-2
Sig Fld Maint Shops	6-447	17-2	55-27
Sig Lab	6-501	17-17	55-500 (AA-AE)
Redstone Arsenal	6-515	17-22	57-2
USA Sig Pub Agcy	6-525	17-25	57-57
Army Pictorial Cen	6-535	17-26	

NG: State AG; units—same as Active Army.

USAR: None.

For explanation of abbreviations used, see AR 320-50.